

Claims

- [c1] A power supply system comprising:
a secondary battery for supplying power to a load circuit,
a power receiving unit for receiving power externally provided to the load circuit;
a switch for selectively supplying the power of the secondary battery or the power externally provided to the load circuit; and
a controller for instructing the switch to stop the supply of the power externally provided to the load circuit for a predetermined time zone.
- [c2] The power supply system according to Claim 1 , wherein the controller instructs the switch to stop the supply of the power externally provided to the load circuit in the predetermined time zone even when the source of the power externally provided is electrically connected with the power receiving unit.
- [c3] The power supply system according to Claim 2 , wherein the controller instructs the switch to supply the power of the secondary battery to the load circuit in the predetermined time zone.
- [c4] The power supply system according to Claim 3 , wherein the controller instructs the switch to supply the power externally provided to the load circuit after the predetermined time zone passes.
- [c5] The power supply system according to Claim 4 , further comprising a battery charger, wherein the controller instructs the battery charger to charge the secondary battery by using the power externally provided after the predetermined time zone passes.
- [c6] A power supply method for selectively supplying the power of a commercial power source or a battery to a load circuit, comprising the steps of:
supplying the power of the battery to the load circuit in a predetermined time zone decided in accordance with the power consumption of the commercial power source; and
supplying the power of the commercial power source to the load circuit in a time zone except the predetermined time zone.

- [c7] The power supply method according to Claim 6 , wherein the predetermined time zone is decided in accordance with a time zone in which the power consumption of the commercial power source shows a peak.
- [c8] The power supply method according to Claim 6 , wherein the time zone in which the power consumption shows the peak lies between 1:00 and 4:00 PM.
- [c9] An electrical apparatus comprising:
a device to be operated by the power of the battery or the commercial power source; and
a control unit for controlling whether to preferentially supply the power of the battery or the power of the commercial power source to the device in accordance with a temporal factor.
- [c10] The electrical apparatus according to Claim 9 , further comprising a power receiving unit for receiving the power of an external commercial power source for the device, wherein the control unit instructs a time zone for supplying the power of the battery to the device preferentially to the power of the commercial power source when the commercial power source is connected to the power receiving unit.
- [c11] The electrical apparatus according to Claim 9 , wherein the battery is built in the electrical apparatus.
- [c12] An electrical apparatus comprising:
a device to be operated by receiving power;
a power receiving unit for receiving the power of an external commercial power source for the device;
a first power supply line for supplying the power of the commercial power source received by the power receiving unit to the device;
a built in battery for supplying power to the device;
a second power supply line for supplying the power of the built in battery to the device; and a switching mechanism for turning off the first power supply line and turning on the second power supply line when the commercial power source is connected to the power receiving unit, the commercial power source is

connected to the power receiving unit, and a predetermined condition is satisfied.

[c13] The electrical apparatus according to Claim 12 , wherein the predetermined condition is set in accordance with a season and a time.

[c14] An electrical apparatus provided with a device to be operated by the power of a built in battery or a commercial power source, comprising:
a switching mechanism for determining whether to supply the power of the built in battery or the power of the commercial power source to the device; and
a controller for instructing the switching mechanism to supply the power of the built in battery to the device when the remained capacity of the built in battery is equal to or more than a predetermined value and supply the power of the commercial power source to the device when the remained capacity of the built in battery is less than the predetermined value.

[c15] The electrical apparatus according to Claim 14 , further comprising:
a battery charger for charging the built in battery by the power of the commercial power source, wherein
the controller instructs the battery charger to charge the built in battery in any time zone after the set predetermined time zone passes.

[c16] The electrical apparatus according to Claim 14 , wherein the electrical apparatus is a portable computer system.

[c17] A power supply method for an electrical apparatus provided with a device to be operated by the power of a built in battery or a commercial power source, comprising the steps of:
supplying the power of the built in battery to the device in a first time zone decided in accordance with the power consumption of the commercial power source;
supplying the power of the commercial power source to the device in a second time zone except the first time zone; and
charging the built in battery by the commercial power source in the second time zone.

[c18] The power supply method according to Claim 17 , wherein charging of the built in battery by the commercial power source in the second time zone is performed by using the maximum charging capacity after the first time zone passes.

[c19] The power supply method according to Claim 17 , wherein charging of the built in battery by the commercial power source in the second time zone is performed by equalized electric energy after the first time zone passes.

[c20] The power supply method according to Claim 17 , wherein charging of the built in battery by the commercial power source in the second time zone is performed in a time zone in which the power consumption of the commercial power source is small in the second time zone.